NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

CROSS WIND RIDGES

(acre) CODE 589A

DEFINITION

Ridges formed by tillage, planting or other operations and aligned across the prevailing wind erosion direction.

PURPOSE

Reduce soil erosion from wind.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies to cropland.

It is best adapted on soils that are stable enough to sustain effective ridges, such as clayey, silty, and sandy loam soils.

It is not well adapted on unstable soils such as sands, loamy sands, and certain organic soils.

CRITERIA

Ridge height, spacing, and direction:

Acceptable combinations of ridge height, spacing, and direction are those having Ridge Roughness K values equal to 0.8 or less during those periods when wind erosion is expected to occur. K values are displayed in Section I, Erosion Prediction, Wind Erosion Prediction, Table 2 and Table 7, of the Wyoming Field Office Technical Guide.

CONSIDERATIONS

Transport of wind-borne sediment and sediment-borne contaminants offsite can be reduced by this practice when used in a conservation management system.

Where water erosion along the furrows formed by ridges is a concern, the hazard can be reduced by farming across the slope according to the standards for Contour Farming or Contour Buffer Strips.

PLANS AND SPECIFICATIONS

Specifications for establishment and maintenance of this practice shall be prepared for each field or treatment unit according to the Criteria, Considerations, and Operation & Maintenance described in this standard.

Specifications shall be recorded using approved specification sheets, job sheets, narrative statements in the conservation plan, or other acceptable documentation.

OPERATION AND MAINTENANCE

Ridges shall be established or reestablished by normal tillage and planting equipment such as chisel plows, drills with hoe openers, or other similar implements that form effective ridges.

After establishment, ridges shall be maintained through those periods when wind erosion is expected to occur, or until growing crops provide enough cover to protect the soil from wind erosion.

If ridges deteriorate and become ineffective due to weathering or erosion, they shall be reestablished unless doing so would damage a growing crop.